

Jie Bao

PERSONAL INFORMATION

WEBSITE / EMAIL / CITY: jiebao.ca / jiebao995@gmail.com / Montreal, Quebec, Canada

COMPUTER SKILLS

PYTHON, C++, TERRAFORM, LINUX, AZURE, FASTAPI, K8S, SQLAlchemy, GIT, DOCKER

EDUCATION

CURRENT	Mila - Université de Montréal , Montreal, Quebec, Canada COMPUTER SCIENCE MASTER STUDENT (PART-TIME) <i>Focus on NLP and Computer Graphics</i> <i>Realistic Image Synthesis - ECSE 546: A</i> <i>Applied Machine Learning - COMP 551: A</i> <i>Natural Language Processing with Deep Learning - IFT 6289: A-</i> <i>Fundamentals of Computer Graphics - COMP 557: Current</i>
2015-2021	Concordia University , Montreal, Quebec, Canada Thesis: Deep Learning for Turbulence Modeling <i>Master of Applied Science, GPA: 4.0/4.3</i> <i>Bachelor of Engineering, Aerospace Engineering</i>

WORK EXPERIENCE

2022- CURRENT	Data Engineering Specialist, CAE Building internal Data Platform - CAE Data Catalog: Implemented data quality and observability backend. Design data pipelines using event-driven autoscaling, and Spark. Addressed data inconsistencies by automatically informing data producers on best action items. API skills creation for chatbot service.
2019-2021	Graduate Student Researcher, COMPUTATIONAL AEROSPACE LAB <i>Turbulence Modeling Technique using Machine Learning Techniques</i> Data cleaning, acquisition and analysis using Matlab and Python. Created an end-to-end ML training pipeline for turbulent production and dissipation values. Achieved over 90% R^2 accuracy. Bi-weekly presentations and practiced public speaking as a researcher and teaching assistant - AERO 490 .

PROJECTS

2023- CURRENT	Path Tracer Engine Implementation from scratch of a Path tracer for global illumination. 3D scenes are generated using next event estimation. Scenes include MIS on Veach's experiment, Stanford Bunny, and Cornell Box. SEE MORE HERE .
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LANGUAGES

FRENCH, ENGLISH, CHINESE (MANDARIN): Fluent

INTERESTS AND ACTIVITIES

Skateboarding, Snowboard, and River Surfing.